## What is claimed is:

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- 1. A method for treating or ameliorating cancer or one or more symptoms thereof, said method comprising administering to a subject in need thereof a therapeutically effective amount of MEDI-507 or antigen-binding fragment thereof.
- 2. A method for treating or ameliorating cancer or one or more symptoms thereof, said method comprising administering to a subject in need thereof a therapeutically effective amount of one or more CD2 antagonists, with the proviso that said CD2 antagonist is not MEDI-507.
- 3. A method for treating or ameliorating cancer or one or more symptoms thereof, said method comprising administering to a subject in need thereof a therapeutically effective amount of an antibody that immunospecifically binds to an epitope comprising amino acid residues 18, 55 or 59 of human CD2, with the proviso that said antibody is not MEDI-507 or LO-CD2a/BTI-322.
  - 4. The method of claim 3, wherein the epitope comprises amino acid residues 55 and 59 of human CD2.
    - 5. A method for treating or ameliorating cancer or one or more symptoms thereof, said method comprising administering to a subject in need thereof a therapeutically effective amount of a CD2 antagonist that does not inhibit or interfere with the interaction between human CD2 and LFA-3, with the proviso that said CD2 antagonist is not MEDI-507 or LO-CD2a/BTI-322.
    - 6. The method of claim 1, 2, 3 or 5 further comprising administering to said subject a therapeutically effective amount of one or more cancer therapies.
    - 7. The method of claim 6, wherein at least one of said cancer therapies is chemotherapy, biological therapy, radiation therapy, hormonal therapy or surgery.
- 8. A method for treating or ameliorating a T-cell malignancy or one or more symptoms thereof, said method comprising administering to a subject in need thereof a dose of a therapeutically effective amount of MEDI-507 or an antigen-binding fragment thereof.
- 9. A method for treating or ameliorating a T-cell malignancy or one or more symptoms thereof, said method comprising administering to a subject in need thereof

a therapeutically effective amount of an antibody that immunospecifically binds to a CD2 epitope comprising amino acid residues 18, 55 or 59 of human CD2, with the proviso that said antibody is not MEDI-507 or LO-CD2a/BTI-322.

- 10. The method of claim 9, wherein the epitope comprises amino acid residues 55 and 59 of human CD2.
  - 11. A method for treating or ameliorating a T-cell malignancy or one or more symptoms thereof, said method comprising administering to a subject in need thereof a therapeutically effective amount of a CD2 antagonist that does not inhibit or interfere with the interaction between human CD2 and LFA-3, with the proviso that said CD2 antagonist is not MEDI-507 or LO-CD2a/BTI-322.
  - 12. The method of claim 8, wherein administration of said therapeutically effective amount of MEDI-507 prolongs the survival of said subject.

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- 13. The method of claim 1, 2, 3, 5, 8, 9 or 11, wherein said subject is human.
- 15 The method of claim 8, 9 or 11, wherein said T-cell malignancy is a precursor T-cell neoplasm or peripheral T-cell or NK-cell neoplasm.
  - T-cell chronic lymphocytic leukemia, a large granular lymphocytic leukemia, a peripheral T-cell lymphoma, angiocentric lymphom, an intestinal T-cell lymphoma, an adult T-cell lymphoma.
  - 16. The method of claim 8, 9 or 11, wherein said T-cell malignancy is not a cutaneous T-cell lymphoma.
  - 17. The method of claim 8, wherein MEDI-507 conjugated to a therapeutic agent or drug.
- 25 18. The method of claim 17, wherein the therapeutic agent is a heterologous polypeptide.
  - 19. The method of claim 17, wherein the therapeutic agent is an antibody that immunospecifically binds to a cell surface receptor other than CD2.

- 20. The method of claim 19, wherein said cell surface receptor is a T-cell or NK cell antigen.
- 21. The method of claim 17, wherein the therapeutic agent is an antibody that immunospecifically binds to a tumor-associated antigen.
- 5 22. The method of claim 2, wherein at least one of the CD2 antagonists is conjugated to a therapeutic agent or drug, with the proviso that said therapeutic agent is not a toxin or a radioactive element.
  - 23. The method of claim 17, wherein said therapeutic agent is a cytotoxin.
- 10 24. The method of claim 23, wherein said cytotoxin is paclitaxel, cytochalasin B, gramicidin D, ethidium bromide, emetine, mitomycin, etoposide, tenoposide, vincristine, vinblastine, colchicin, doxorubicin, daunorubicin, dihydroxy anthracin dione, mitoxantrone, mithramycin, actinomycin D, 1-dehydrotestosterone, glucocorticoids, procaine, tetracaine, lidocaine, propranolol, puromycin, epirubicin, or cyclophosphamide.
  - 25. The method of claim 8 further comprising administering to said subject one or more subsequent doses of a therapeutically effective amount of MEDI-507 or an antigen-binding fragment thereof.
- 26. The method of claim 8 further comprising administering to said subject a therapeutically effective amount of one or more standard or experimental therapies for a T-cell malignancy.
  - 27. The method of claim 9 or 11 further comprising administering to said subject a therapeutically effective amount of one or more standard or experimental therapies for a T-cell malignancy.
- 28. The method of claim 26, wherein at least one of said therapies is antibody therapy, cytokine therapy, chemotherapy, hematopoietic stem cell transplantation, T-cell mediated therapy, biological therapy, radiation therapy, hormonal therapy, or surgery.
- 29. The method of claim 27, wherein at least one of said therapies is antibody therapy, cytokine therapy, chemotherapy, hematopoietic stem cell transplantation,

T-cell mediated therapy, biological therapy, radiation therapy, hormonal therapy, or surgery.

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- 30. The method of claim 26, wherein said standard or experimental therapies are administered prior to, concomitantly with, or subsequent to the administration of MEDI-507 or an antigen-binding fragment thereof.
- 31. The method of claim 8, wherein said subject has previously been treated by the administration of one or more standard or experimental therapies for a T-cell malignancy but not by the administration of MEDI-507 or an antigen-binding fragment thereof.
- 10 32. The method of claim 8, wherein MEDI-507 or an antigen-binding fragment thereof is administered intravenously, subcutaneously, intramuscularly, or ally, or intranasally.
  - 33. A pharmaceutical composition comprising one or more CD2 antagonists, in an amount effective to prevent, treat, manage, or ameliorate cancer, and a pharmaceutically acceptable carrier.
  - 34. A pharmaceutical composition comprising one or more CD2 antagonists, in an amount effective to prevent, treat, manage, or ameliorate a T cell malignancy, and a pharmaceutically acceptable carrier.
- 35. A pharmaceutical composition comprising MEDI-507 or an antigenbinding fragment thereof, in an amount effective to prevent, treat, manage, or ameliorate cancer, and a pharmaceutically acceptable carrier.
  - 36. A pharmaceutical composition comprising MEDI-507 or an antigenbinding fragment thereof, in an amount effective to prevent, treat, manage, or ameliorate a T cell malignancy, and a pharmaceutically acceptable carrier.
- The composition of claim 33 or 34, wherein the CD2 antagonist is not MEDI-507.
  - 38. The composition of claim 33 or 34, wherein the CD2 antagonist is not conjugated to a toxin or a radioactive element.

- 39. A pharmaceutical composition comprising an antibody that immunospecifically binds to a CD2 epitope comprising amino acid residues 18, 55 or 59 of human CD2, with the proviso that said antibody is not MEDI-507 or LO-CD2a/BTI-322, in amount effective to prevent, treat, manage, or ameliorate a cancer, and a pharmaceutically acceptable carrier.
- 40. The composition of claim 39, wherein the epitope comprises amino acid residues 55 and 59 of human CD2.

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- 41. A pharmaceutical composition comprising a CD2 antagonist that does not inhibit or interfere with the interaction between human CD2 and LFA-3, with the proviso that said CD2 antagonist is not MEDI-507 or LO-CD2a/BTI-322, in amount effective to prevent, treat, manage, or ameliorate a cancer, and a pharmaceutically acceptable carrier.
- 42. The composition of claim 33, 34, 35 36, 39, 41, or 42 further comprising one or more chemotherapeutic agents, radiation therapeutic agents, hormonal therapeutic agents, or biological therapeutic agents.
- 43. The pharmaceutical composition of claim 33 or 34, wherein the CD2 antagonist is not LFA-3TIP.